

--6. An aqueous dispersion of a vinylidene fluoride polymer, which comprises a vinylidene fluoride polymer having an average particle size of not more than 200 nm, wherein a solid content is from 30 to 50 % by weight, and a content of a fluorine-containing surfactant is not more than 1% by weight on the basis of water.--

REMARKS

Claim 1 has been amended above by removing the limitation of an average particle size of not more than 200 nm. This aspect of applicant's claimed invention is supported in Comparatives Example 1 to 4 shown in Table 1 of the specification. Further, the omission of the particle size limitation in Claim 1 is consistent with the description in applicant's specification disclosure on page 6, lines 25-37, and elsewhere. Claims 3-5 have been canceled, and Claim 6 has been added to the application. Claim 6 is similar in scope to original Claim 1.

Accordingly, Claims 1 and 6 are in the application for consideration by the Examiner. Since Claims 3-5 have been canceled, the rejection thereof under 35 U.S.C. § 101 as set forth in item 4 on page 3 of the Official Action is now moot.

Claim 1 was rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for a polymerization system containing a

fluorine containing surfactant and a non-fluorinated surfactant, does not reasonably provide enablement for a system containing a fluorinated surfactant only. The Official Action continued that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The Official Action stated that on page 4, lines 13-21, the specification clearly states that in order for particle size to be decreased to not more than 200 nm, it has to be done by adding a nonionic non-fluorine-containing surfactant on top of the fluorine containing surfactant. The Official Action further stated that on page 6, the specification uses the term “usually necessary” but there is no statement or Example showing the “unusual” situation. Finally, the Official Action stated that Comparative Example 5 uses the same system as Example 3, which has 0.05g polyoxyethylene lauryl ether in the recipe.

Applicant respectfully submits that present specification disclosure enables Claims 1 and 6 as now presented in this application within the meaning of 35 U.S.C. § 112, first paragraph.

Since Claim 1 does not now require that the average particle size is not more than 200 nm, such a claim is clearly supported in Comparative Examples 1-4, which do not contain the non-ionic non-fluorine containing surfactant. Accordingly, applicant respectfully submits that amended Claim 1 is supported

in the specification disclosure within the meaning of 35 U.S.C. § 112, first paragraph. Therefore, applicant respectfully requests the Examiner reconsider and withdraw this rejection, especially with respect to amended Claim 1.

New Claim 6 includes the particle size limitation of not more than 200 nm. With respect to the aqueous dispersion of Comparative Example 5 in the present application, it is respectfully noted that in this comparative example the precipitation of the fluorine-containing surfactant is produced at drying the formed film. In other words, the fluorine-containing surfactant precipitates into the film when formed from the aqueous dispersion of applicant's claims. This is a difficulty or problem with Comparative Example 5.

In order to demonstrate that the sole use of the fluorine-containing surfactant is effective for producing particles having an average particle size of not more than 200 nm as set forth in Claim 6 or original Claim 1, an additional example was prepared, which is set forth in the Rule 132 declaration of Mr. Nobuhiko Tsuda (hereinafter referred to as the "Tsuda declaration") that is attached hereto.

In the Tsuda declaration, the aqueous dispersion in accordance with Comparative Example 5, but without any nonionic non-fluorine-containing surfactant, was concentrated and a portion of the fluorine-containing surfactant was removed to prepare an aqueous dispersion (solid content: 32.3 wt%, fluorine-containing surfactant content: 0.78 wt% to water, an average

particle size: 198 nm). This concentrated aqueous dispersion having a low content of fluorine-containing surfactant was very stable for a long time and did not produce any precipitation of surfactant in the dry film. In other words, the Tsuda declaration shows that the aqueous dispersion within the scope of Claim 6 (or original Claim 1), as well as those of amended Claim 1, where the sole use of the fluorine-containing surfactant in the amount of not more than 1% by weight is used, and can provide good and unexpected results.

The attached Tsuda declaration demonstrates that the descriptions in applicant's specification disclosure at, for example, page 4, lines 7-12, or original Claim 1 mean precisely what they state, namely that presently claimed invention encompasses a composition comprising, *inter alia*, a fluorine-containing surfactant in an amount of not more than 1% by weight is used alone without the addition of a nonionic non-fluorine-containing surfactant.

Applicant's specification disclosure explains that the addition of a very small amount of the nonionic non-fluorine-containing surfactant can be used in the invention. While use of the nonionic non-fluorine-containing surfactant may be preferable in the present invention, applicant's specification disclosure never states that the non-fluorine-containing surfactant is absolutely necessary. The attached Tsuda declaration verifies and confirms the statement the present application disclosure on page 4, lines 7-12, original Claim 1, and elsewhere that a dispersion as set forth in the present claims having an average

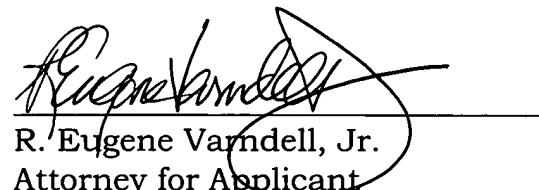
particle size of not more than 200 nm can be obtained by the use of the fluorine-containing surfactant alone. Accordingly, applicant respectfully submits that the invention as set forth in Claim 6 is enabled by the present specification disclosure within the meaning 35 U.S.C. § 112, first paragraph. Therefore, applicant respectfully requests the Examiner reconsider and withdraw this rejection.

For the foregoing reasons, a formal allowance of Claims 1 and 6 is respectfully requested.

While it is believed that the present response places the application in condition for allowance, should the Examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which may become due, may be charged to our Deposit Account No. 22-0256.

Respectfully submitted,  
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